

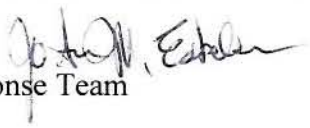


UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
ENVIRONMENTAL RESPONSE TEAM – WEST
4220 S. Maryland Parkway, Bldg D, Suite 800
Las Vegas, Nevada 89119

May 13, 2010

MEMORANDUM

SUBJECT: H₂S Air Monitoring for the BP Deepwater Horizon Oil Spill Response

FROM: JoAnn M. Eskelsen 
Environmental Response Team

TO: Glenn Adams, R4
Jon Rauscher, R6

The U.S EPA Environmental Response Team was requested by Regions IV and VI to evaluate the need to continue monitoring for airborne H₂S at the BP Deepwater Horizon Oil Spill Response. Based on a review of air monitoring data taken to date at or near the spilled oil, information on the type of oil, and ERT's knowledge and experience on the formation of H₂S, it is suggested that the air monitoring for H₂S can be suspended.

From April 27 – May 9, BP has collected air monitoring data from 15 vessels responding to the spill. For each reading the instrument records LEL (%), O₂ (%), H₂S (ppm), CO (ppm) and VOC (ppm). Of the more than 1200 readings only one analysis indicated the possible presents of H₂S; that reading of 0.1 ppm collected on May 7 on the Port Walk of the Enterprise is at the detection limit of the equipment being used. This data shows that there is no significant amount of H₂S off-gassing from the spilled oil once it reaches the surface.

Based on a report dated May 11, 2010 prepared for the Unified command Public Health Unit by CTEH, the Deepwater Horizon crude is a "light sweet" oil, meaning it is low in sulfur content.

It was suggested at a recent meeting between the public and EPA that hydrogen sulfides can be produced by the microbial process of oil degradation. This is indeed true under anaerobic conditions, however, since the spilled oil is under aerobic conditions it is doubtful that any significant amounts of hydrogen sulfides would be produce by this mechanism.

Based on the above reasons, ERT, believes that there is no need to continue air monitoring for H₂S, since there is no evidence that it is found in the source.

cc: Dennisses Valdes, ERT
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